Memorandum

The City of Traverse City
Engineering Department

TO: Russ Soyring, City Planning Director

FROM: Timothy J. Lodge, City Engineer

DATE: February 26, 2014

SUBJECT: Progress Report for Parking Lot D and Boardman River Boat Launch and Improvements

This memo is to provide an update for the above referenced project. The scope of the project as envisioned by the grant applications include:

1. Installation of new boat launch and piers
2. A universally accessible canoe/kayak launch
3. Resurfacing the parking lot with the use of porous pavers in the turnaround area and launch exit
4. Installation of rain gardens along the southern edge of the lot
5. Installation of retaining walls near the launch and turnaround to stabilize eroding site banks,
6. Installation of trees and native plantings
7. Boat cleaning/invasive species education signage.

The grant period for the CZM Grant ($80,000) is January 1, 2014 to May 15, 2015. The grant period for the Waterways Grant ($156,200 less the management fee) is three years from the Agreement date which has yet been determined. Recent activities are as follows:

Timeframe	Recent Activity
March 2013	Temporary Funding Delay Waterways Grant Processed Grant Application to CZM with revised timeline, conducted geotechnical investigation.
August/November 2013	Processed CZM Grant Agreement, hired consultant to perform topographic surveying and mapping and design development.
December 2013	Processed Waterways Grant Agreement, design development, coordination with MDNR boat launch criteria and met with MDOT for use of their ROW.
January/February 2014	Design development

As noted at a recent City Commission meeting there were the following concerns with the conceptual design drawing which are addressed in the design of the project and noted below:

a) *River navigation channel width and interference with docking along south side of the river. The project as shown projected into the navigation channel.* The design has been modified to eliminate interference with the navigation channel and docking along the south side.
b) *Temporary boat tie-up at launch. Currently there aren't any facilities to temporarily tie up a boat that is being launched.* The design incorporates a 20' long floating dock system in conjunction with the kayak launch for providing this functional activity.
c) *MDOT Right of Way Encroachment. The conceptual design and MDNR Waterway requirements include a minimum 60' diameter turn around. Preliminary meetings with MDOT express concern about this encroachment*. The design investigated the feasibility and requirements for minimizing or eliminating the encroachment. We were successful in having the MDNR Waterways reduce the 60' diameter requirement and allow a 50' diameter turn around which minimizes the extent of the MDOT encroachment to be nearly the same as it exists today. MDOT has concurred with staff and we are in process of obtaining the MDOT right of way permit. This change also allows for the elimination of retaining walls, item 5 above.

In addition to the concerns noted above, changes in the scope of the project are required as follows:

a) Stormwater Runoff- The April 2011 conceptual drawing shows 'Rain Gardens' South of the parking lot. After consideration in the design process we have determined that this would require removal of established trees and vegetation that would be detrimental to the stability of the river bank and would negate the ecological benefits of this established natural buffer. Also, the existing river bank is relatively steep and construction of a basin (Rain Garden) would require filling in the flood plain for which a permit would not likely be obtained. Finally, the location would not provide sufficient volume for runoff storage for a typical 25 yr., 24 hr. storm event. Therefore we have replaced the functional aspect of the 'Rain Gardens' and provided oil/grit separation from the stormwater in new catch basins which will intercept and collect the stormwater before it is

conveyed to the river. The proposed catch basins will have baffles (Traverse City Outlet Covers) that reduce the amount of trash and insoluble pollutants from the stormwater. They also provide sumps below the catch basin outlet to settle out and collect solids such as sand and iron oxide. Additionally, the outlet covers will have "Bio-Skirts" attached to them. These skirts are treated with an antimicrobial agent to reduce soluble bacterial pollutants such as bird feces from leaving the catch basin and entering the river. These skirts also absorb insoluble pollutants such as oil and gas increasing the effectiveness of the baffle itself for this type of pollutant. Native plantings and trees will be considered in the final landscaping plan to address any unstable slope areas.

b) Porous Pavement - The porous paver areas as shown on the conceptual drawing to reduce the amount of runoff conveyed to the river and bring an aesthetic quality have been revised to address concerns with subsurface soil contamination from previous site activities. Further changes may be required as part of the final design.
c) Dredging – The initial concept did not include dredging which will be required for the boat ramp use to allow an adequate water depth to access the main river channel.

The project is anticipated to be completed in accordance with the following schedule to have the project completed by the May 15, 2015 grant period as follows:

Scheduled Timeframe	Activity
January 2014	Design Development, Meetings with MDEQ and MDOT
February/March 2014	Design Development Final Design
March/May 2014	Permits/MDNR Plan Review
May/June 2014	Bidding
September/November 2014	Construction

US HIGHWAY 31 / E GRANDVIEW PARKWAY

PAVERS

N PARK STREET

BRIDGE DECK ±590.2

ROW

WOOD BOARDWALK

PROP. DR. STR. #2, 4' DIA.
EOM = ### ##
INV. N. = 581.75 (15" RCP)
INV. S. = 581.58 (15" RCP)
2' SUMP ELEV. = 579.59
COVER K
WITH TRAVERSE CITY
OUTLET COVER

PRIVATE WOOD DOCK

BOARDMAN RIVER

PRIVATE WOOD DOCKS

#309 #311 #313 #315 #317 #319 #321

PROP. DR. STR. #2, 4' DIA.
EOM = ### ##
INV. S. = 581.80 (12" RCP)
2' SUMP ELEV. = 579.80
COVER K
WITH TRAVERSE CITY
OUTLET COVER

MATCHLINE A (SEE ABOVE)

PROP. DR. STR. #4, 2' DIA.
RIM = 584.87
INV. N. = 583.26 (12" RCP)
INV. S. = 582.36 (12" RCP)
COVER B
47' OF SEWER, CL.E.
12 INCH, TR DET 8 @ 5.0%

SEGMENTAL CONCRETE BOAT RAMP

TACTILE STRIP

R.O.W

STEEL RET. WALL

FLOATING DOCK WITH GANGWAY

DREDGE AREA

577.00 576.00 575.00 574.00 573.00 572.00 571.00

6' CONCRETE SIDEWALK

CONNECT TO EXISTING WOOD BOARDWALK

KAYAK LAUNCH

PROP. DR. STR. #1, 4' DIA.
EOM = ### ##
INV. N. = 580.18 (12" RCP)
INV. S. = 579.98 (12" RCP)
2' SUMP ELEV. = 577.98
COVER K
WITH TRAVERSE CITY
OUTLET COVER

BOARDMAN RIVER

PRIVATE WOOD DOCKS

PRIVATE DOCKS

N

SCALE: 1" = 20'

0 20' 40'

LEGEND

- FOUND PROPERTY CORNER
- BENCHMARK
- SIGN
- GAS BOX
- UTILITY POLE
- GUY WIRE
- WATER VALVE
- PED LIGHT POLE
- ELECTRIC RISER
- TELEPHONE RISER/BOX
- FIRE HYDRANT
- CATCHBASIN
- BEEHIVE GRATE CATCHBASIN
- STORM MANHOLE
- SANITARY MANHOLE
- DECIDUOUS TREE
- CONIFEROUS TREE
- TREE LINE
- SHRUB LINE
- OVERHEAD ELECTRIC
- UNDERGROUND ELECTRIC
- OVERHEAD TELEPHONE
- UNDERGROUND TELEPHONE
- OVERHEAD CABLE TV
- UNDERGROUND CABLE TV
- SANITARY SEWER
- STORM SEWER
- WATERMAIN
- GUARDRAIL
- FENCE
- TOP/BOTTOM OF SLOPE

HATCH LEGEND

- PROPOSED PERMEABLE PAVEMENT

CITY OF TRAVERSE MICHIGAN Engineering

The City of Traverse City
Engineering Department

GOVERNMENTAL CENTER
400 Boardman Avenue
Traverse City, Michigan 49684

CITY OF TRAVERSE CITY
BOARDMAN RIVER BOAT LAUNCH IMPROVEMENTS
CONSTRUCTION SHEET 1

Revision/Issue	Date
REVIEW	11/25/13

Date: 11-25-13
Project No.: 14-PA-0007
Drawn By: JDM
Scale: N.A.
Sheet No.: 5 OF 6